

***Pseudogonaphodiellus zdzislawae*, new genus and new species of Mexican Aphodiini (Scarabaeoidea: Aphodiidae)**

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Received: 27 Jan. 2007

Accepted: 25 March 2007

DELLACASA M., GORDON R. D., DELLACASA G. 2007. *Pseudogonaphodiellus zdzislawae*, new genus and new species of Mexican Aphodiini (Scarabaeoidea: Aphodiidae). *Acta zoologica cracoviensis*, **50B**(2): 139-142.

Abstract. *Pseudogonaphodiellus zdzislawae*, new genus and new species of Mexican Aphodiini, is described and figured.

Key words: Scarabaeoidea, Aphodiidae, *Pseudogonaphodiellus zdzislawae*, new genus, new species, Mexico.

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INTRODUCTION

In preparation for a complete treatment of Mexican Aphodiinae, we herein describe a new genus and a new species as preliminary findings. The terminology used in this paper to describe external features follows that of DELLACASA G. et al. (2001).

Genus *Pseudogonaphodiellus* nov.

Type species: *Pseudogonaphodiellus zdzislawae* sp. n. here designated.

D i a g n o s i s. Small species (length 5.0-6.0 mm), oblong, moderately convex, shiny, almost glabrous. Brownish; clypeal margin, sides of pronotum and elytra yellowish marginate. Head with epistoma evenly punctured; clypeus anteriorly truncate, rounded at sides, thickly bordered, the border very shortly bristled; genae acute, ciliate, protruding more than eyes; frontal suture obsolete. Pronotum transverse, moderately convex, evenly sparsely punctured; lateral margins feebly arcuate, thickly bordered; hind angles obtusely widely truncate; base bordered. Scutellum small, triangular, flat. Elytra oval, rather convex, denticulate at shoulder, finely striate; striae subcrenulate; intervals almost flat, finely punctured, sparsely pubescent preapically. Fore tibiae distally tridentate and proximally serrulate at outer margin, upperside smooth. Hind tibiae with distinct transverse carinae on outer face, apically fimbriate with spinules unequal, alternately elongate. Pygidium superficially sparsely finely punctured, punctures with extremely fine, rather elongate recumbent hairs, apical margin with few sparse and very elongate setae. Sexual dimorphism shown in males

mostly by head and pronotum wider than in female, less convex and less coarsely punctured, by fore tibiae slender and more elongate and by metasternal plate incavate and distinctly pubescent on each side anteriorly. Aedeagus with paramera very short, almost as long as one third of tegmen, apically abruptly curved and acuminate. Epipharynx (fig. 4) with almost straight anterior margin, rounded at sides; epitorma broadly campaniform; corypha with apical clump of spiculae protruding beyond front margin; pedia shortly pubescent with many elongate spines irregularly scattered; chaetoparia elongate and rather densely arranged.

Species parvae, oblongae, modice convexae, nitidae, fere glabrae. Brunneae; capite, pronotoque plus minusve late luteomarginatis; elytris irregulariter flavomaculatis. Capite epistoma subaequaliter punctato; clypeo antice subtruncato, lateribus rotundato; genis prominulis; sutura frontali obsoleta. Pronoto transverso, subaequaliter sparse punctato; angulis posticis oblique late truncatis; basi distincte marginato. Scutello parvo, triangulari. Elytris humeribus denticulatis; striis leviter punctatis, subcrenulatis; interstitiis fere planis, sparse punctulatis. Metatibiis setis apicalibus longitudine irregulariter inaequalibus.

Distribution. Mexico (Guerrero and Oaxaca)

Remarks. Distinctive generic characters are:

- scutellum small, triangular;
- pronotum with hind angles widely truncate and base bordered;
- elytra distinctly denticulate at shoulder;
- hind tibiae apically fimbriate with spinules unequal, alternately elongate;
- epipharynx different from that of *Gonaphodiellus* but resembling that of *Cephalocyclus*.

Pseudogonaphodiellus keys to couplet 108 in the key of Aphodiini (DELLACASA G. et al. 2001), but is immediately distinguished from *Parammoecius* by the clypeus rounded at sides and from *Acanthobodilus* mainly by the hind angles of pronotum truncate.

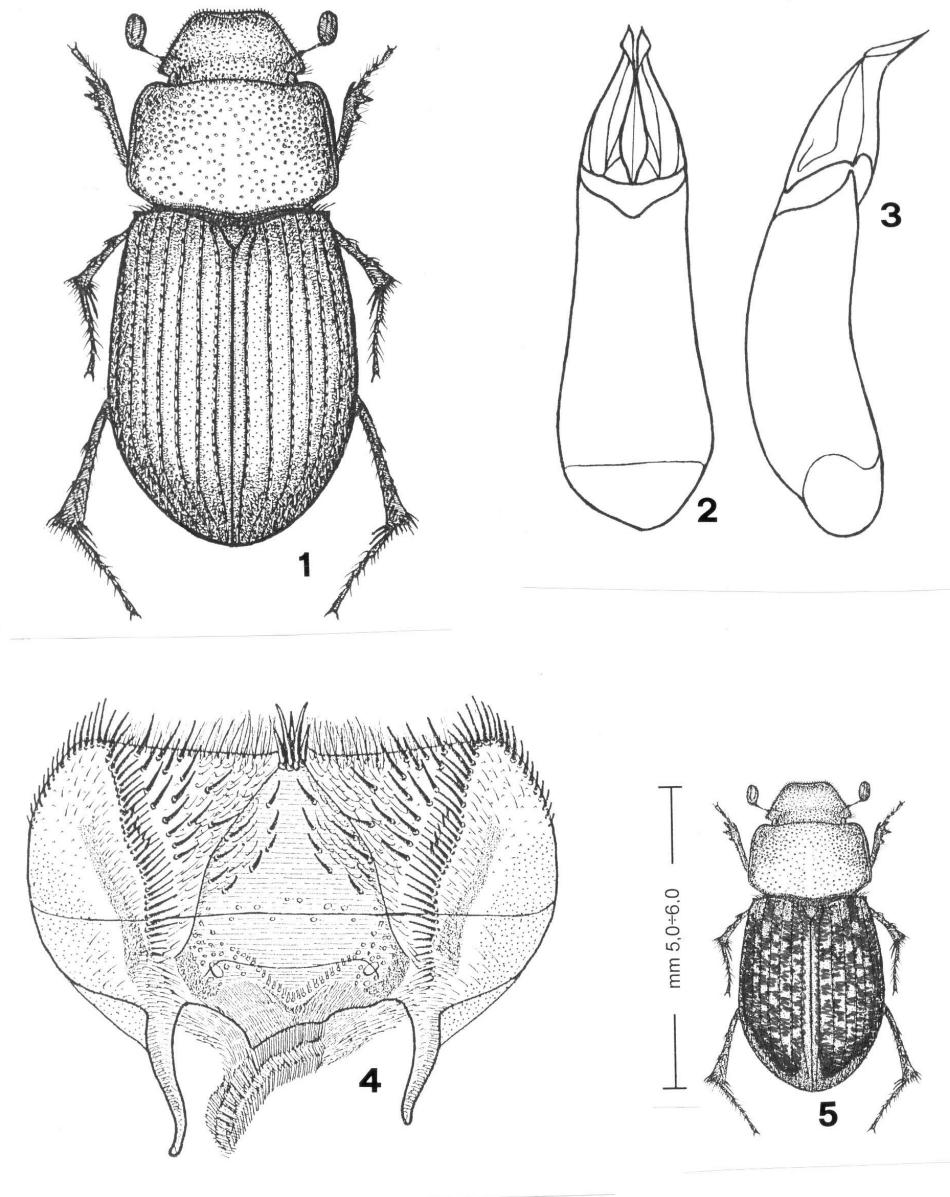
Pseudogonaphodiellus zdzislawae sp. n.

(Figs 1-5)

Type material. Holotype male and allotype female: Mexico, Oaxaca, San Mateo Rio Hondo, El Manzanal dint., 16°07'57.4"N, 96°29'48.5"W, 2500 m, 6.VII.2002, leg. DELLACASA M. & MARTINEZ I. (horse dung). Type repository. DELLACASA Collection, Genoa (Italy).

Paratypes: Mexico, State of **Guerrero**: Filo de Cabillo, 10.3 km SW, 8.VII.1987, leg. KOVARIK P., ex rotting fungi, 3 exx. (P. KOVARIK Collection, Florida Department of Agriculture, Gainesville); Mazatlan, 7.5 mi W, 7100', 5.IX.1971, leg. NEWTON A., 11 exx. (HOWDEN H. & A. Collection, Ottawa); Omiltemi, 25.VII.1965, leg. HALFFTER G., 8 exx. (Canadian National Collection, Ottawa; HOWDEN H. & A. Collection, Ottawa); State of **Oaxaca**: km. 154 on Rt. 175 S. of Oaxaca, 8000', 2-3.VI.1971, leg. HOWDEN H.F., 14 exx. (HOWDEN H. & A. Collection, Ottawa); Hwy 175, San José del Pacífico, 2400 m, 19.VI.1979, leg. HOWDEN H. & A., 6 exx. (HOWDEN H. & A. Collection, Ottawa); Rd 175 to Miahuatlán, San José del Pacífico, 16°09'55.4"N-96°30'07.1"W, 2250 m, 6.VII.2002, leg. DELLACASA M. & MARTÍNEZ I. (horse dung), 2 exx. (DELLACASA Collection, Genoa); San Mateo Rio Hondo, El Manzanal dint., 16°07'57.4"N-96°29'48.5"W, 2500 m; 6.VII.2002, leg. DELLACASA M. & MARTÍNEZ I. (horse dung), 28 exx. (DELLACASA Collection, Genoa); Suchixtepec, 3 mi N, 9500', 4.VI.1971, leg. PECK S., Ber 209, oak litter, 2 exx. (HOWDEN H. & A. Collection, Ottawa); *idem*, 4-6.VI.1971, leg. HOWDEN H. & A. (dung trap), 7 exx. (HOWDEN H. & A. Collection, Ottawa); *idem*, 4-6.VI.1971, leg. HOWDEN H., 1 ex. (HOWDEN H. & A. Collection, Ottawa); Suchixtepec, 8 Km S, 10.VIII.1986, leg. HOWDEN H. & A. (dung trap), 25 exx. (HOWDEN H. & A. Collection, Ottawa).

Description. length 5.0-6.0 mm, oblong, moderately convex, shiny, almost glabrous. Brownish; clypeal margin, sides and base of pronotum and elytra, mainly toward apex, more or less widely yellowish; sometimes latter with many irregular yellowish discal spots variously ar-



Figs 1-5. *Pseudogonaphodiellus zdzislawae* sp. nov.: (S. Mateo Rio Hondo; El Manzanal dint; Edo Oaxaca; Mexico): 1 – habitus of male (morphological details); 2-3 – aedeagus, dorsal and lateral view; 4 – epipharynx 5 – habitus (*forma typica*).

ranged; legs and antennal club dark brown-reddish. Head with epistoma faintly convex, finely, subregularly sparsely punctured; punctuation sparser and finer on disc; clypeus subtruncate anteriorly, rounded at sides, rather thickly bordered, border somewhat upturned and shortly densely bristled; genae acutely angulate; sparsely ciliate, protruding more than eyes; frontal suture obsolete; front evenly punctured. Pronotum transverse, feebly convex, evenly subregularly punctured; punctuation somewhat denser on sides, more fine and sparse on disc. Lateral margins feebly arcuate, thickly bordered, border glabrous; hind angles widely obtusely truncate; base feebly bisinuate, distinctly bordered. Scutellum flat, with few punctures near base. Elytra oval, convex, slightly widened posteriorly, distinctly denticulate at shoulder; striae fine, superficially punctured, subcrenulate; intervals almost flat, very finely punctured, sparsely pubescent on preapical declivity. Hind tibiae superior apical spur shorter than first tarsal segment; latter longer than following three combined. Male: head and pronotum relatively more transverse, less convex and more sparsely superficially punctured; fore tibiae slender and elongate; metasternal plate incavate and distinctly pubescent at each side anteriorly; aedeagus: figs 2-3. Female: head and pronotum relatively narrower, more convex and more densely coarsely punctured; fore tibiae stouter and shorter; metasternal plate almost flat, glabrous.

Distribution. Known from the Mexican states of Guerrero and Oaxaca.

Bionomics. Coprophagous (collected in horse dung) and saprophagous species.

Derivation of name. Named in honour of Dr. Zdzisława T. STEBNICKA, eminent specialist in Eupariinae.

REFERENCES

DELLACASA G., BORDAT P. & DELLACASA M., 2001. A revisional essay of world genus-group taxa of Aphodiinae - *Memorie della Società entomologica italiana*, **79** [2000]: 1-482.